

WRITTEN OPINION OF THE INTERNATIONAL SEARCH OFFICE

(SUPPLEMENTARY PAGE) Intern. File No. PCT/DE2004/001733

Re Point V.

1. The present opinion makes reference to the following documents:

D1: DE 41 33 466 A (FUJI ELECTRIC CO LTD) May 7, 1992
(1992-05-07)

D2: US-A-5 967 860 (RICKETTS ET AL) October 19, 1999
(1999-10-19)

2. The present application does not satisfy the requirements of Article 33(1) PCT, because the subject matter of Claims 1 through 4, 6 and 7 is not novel within the meaning of Article 33(2) PCT.

- 2.1 Document D1 discloses (the references in parentheses relate to this document):

A contact surface for electrical contact, a 7 μm thick Ag layer being situated on a copper-based substrate (page 4, lines 24 and 25), which has been deposited with the aid of galvanic methods and includes finely dispersed graphite particles (page 3, lines 43 to 46), which have a length of 0.5 to 2 μm (page 3, line 58) and a thickness and width of 0.2 to 0.5 μm (page 3, line 58).

The Ag density is 10.5g/cm³, the graphite density of 2.25g/cm³, and 6% vol. of graphite dispersed in the Ag matrix (page 3, lines 44 and 45) is the same as approximately 1.35 % wt. of graphite dispersed in the Ag matrix.

EV322953395

The subject matter of Claims 1 through 4 and 6 is therefore not novel (Article 33(2) PCT).

2.2 The particles of the graphite powder have random length, thickness and width (Figure 2), and the subject matter of Claim 7 cannot be considered novel (Article 33(2) PCT).

3. The present application does not satisfy the requirements of Article 33(1) PCT, because the subject matter of Claims 5 and 8 is not based on an inventive step within the meaning of Article 33(3) PCT.

3.1 The electroplating method of document D1 is intended to disperse the graphite particles in the Ag matrix in an anisotropic/statistical manner.

On the other hand, document D2 discloses the advantages of an additional layer of pure silver (column 5, line 51, to column 6, line 8). If one skilled in the art wanted to achieve the same purpose in a contact surface according to document D1, he would add these features of document D2 and arrive at a contact surface according to Claim 5 without an inventive step.

Therefore, the subject matter of Claim 5 cannot be regarded as inventive (Article 33(3) PCT).

3.2 Document D2 discloses the use of a similar contact surface in automotive plug connections in close proximity to the engine, and the subject matter of Claim 8 is thus not inventive (Article 33(3) PCT).